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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,603

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EXAMINER

LONG, DONNELL ALAN

ART UNIT

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4128

MAIL DATE

DELIVERY MODE

03/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,603	<b>Applicant(s)</b> JEONG, JIN-DO	
	<b>Examiner</b> DONNELL LONG	<b>Art Unit</b> 4128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/01/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "protrusion member" in line 9. There is insufficient antecedent basis for this limitation in the claim. Claims 2-13 depend from claim 1 and are likewise indefinite.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tucker et al. (4238056).

For purposes of examination, the limitation "protrusion member" in line 9 is understood to be the same as the limitation "protrusion part" in line 3.

Tucker et al. discloses a liquid dispensing apparatus capable of regulating a discharged amount of liquid, the apparatus comprising:

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a main body (marked-up fig. 13) having a liquid storing part (32) formed therein and a protrusion part (34) communicating with the liquid storing part at a side of the main body (fig. 8), downwardly protruding and having a threaded part formed therein (i.e. screw in lower part of 34 in fig. 8), a support member (50) having a liquid supply aperture (52) formed thereto being provided in the protrusion part (fig. 8);

a liquid discharge-operating member (96) supported to be vertically movable on the support member (fig. 8) provided to the protrusion part of the main body and controlling a liquid inflow into the protrusion member (col. 9, lines 64-67);

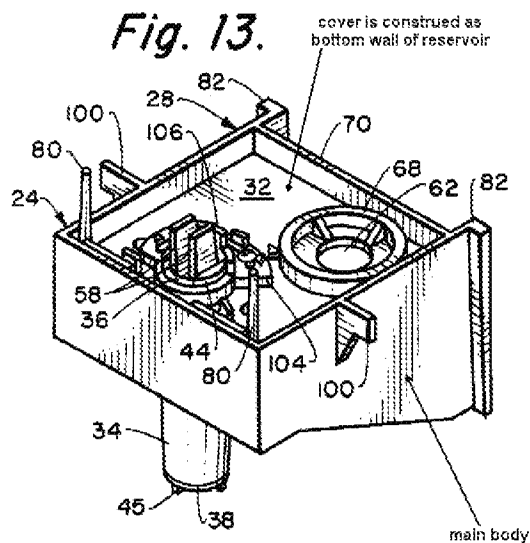
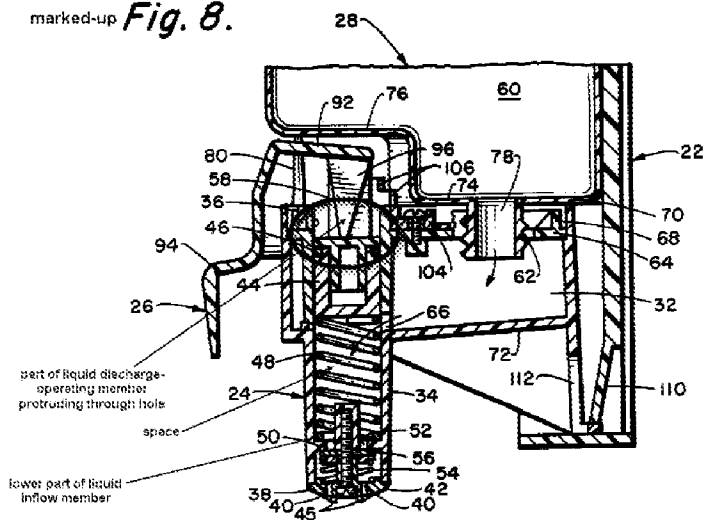
a cover (marked-up fig. 13) fixed on an upper part of the main body to which the liquid discharge-operating member is supported and having a hole (36) through which a part of the liquid discharge-operating member is protruded (marked-up fig. 8) and an opening (62) into which a liquid supply receptacle is inserted and fixed;

a liquid discharging member (44, 48) thread-engaged to be relatively movable to the threaded part of the protrusion part (i.e. as the piston is moved downward toward the threaded part as shown in figures 8 and 9), capable of changing an inner space formed with the protrusion part (i.e. the volume of the chamber containing part 48 decreases as the discharging member is moved downward as seen in figures 8 and 9) and vertically moved as the liquid discharge-operating member is vertically moved (col. 9, lines 64-67), thereby discharging the liquid to an exterior (col. 9, lines 64-67 and col. 10, lines 1-7);

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a lever (26) pivotally mounted to the main body (col. 8, lines 67-68) and pressing the liquid discharge-operating member protruded through the hole of the cover to be moved (col. 9, lines 64-67).

marked-up

marked-up **Fig. 8.**

Regarding claim 6, the liquid discharging member comprises, a liquid inflow member (48) having a space formed therein (marked-up fig. 8), thread-engaged (via

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support member 50) with the threaded part of the protrusion part and capable of being vertically relatively-movable to the protrusion part (i.e. upon actuation of the lever 26), thereby regulating a volume of the protrusion part (as indicated by the change in volume of the space shown in marked-up fig. 8; also figs. 8 and 9); and a lower opening/closing member (56) connected to the liquid discharge-operating member so that it is operated by the liquid discharge-operating member (i.e. as the liquid discharge-operating member is moved down, fluid is forced through air passages 52 to move the lower opening/closing member) and capable of being air-tightly engaged to a lower part of the liquid inflow member (i.e. by sealing air passages 52 which are connected to a lower part of the liquid inflow member via the support member 50; also marked-up fig. 8).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

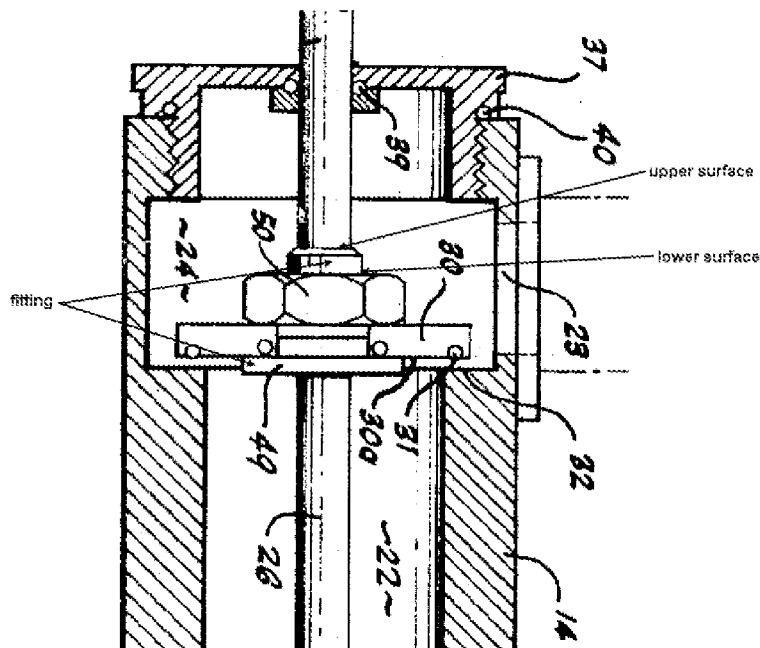
6. Claims 2, 3, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker et al. (as discussed supra) in view of Aperlo (3738543).

Regarding claim 2, the liquid discharging member of the Tucker et al. reference comprises, a first elastic member (48) compressively supported on the support member (50; also figs. 8-9); and an upper opening/closing member (44) forced upwardly by the first elastic member (figs. 8-9).

The Tucker et al. reference DIFFERS in that it does not disclose that the liquid discharging member contains all limitations as claimed. Attention, however, is directed to the Aperlo reference, which discloses another lever actuated liquid dispensing apparatus including a liquid discharging member (36, 30, 26, 49, 50, 44, 47) comprising, an upper opening/closing member (30), having an operating shaft (26) formed at a lower surface thereof (fig. 2), downwardly protruding through a support member (49) in the protrusion part (14) and fixed at a lower surface of the support member by a fastening member (marked-up fig. 2), and capable of being air-tightly engaged to the protrusion part (via seal 31; also fig. 2) at a connected region with a liquid storing part (12); and a pressing member (44) mounted on the upper opening/closing member, having a second elastic member (47) mounted therein.

It, therefore, would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Tucker et al. reference by employing the liquid discharging member in view of the teachings of the Aperlo reference because the lever actuated dispensing mechanism of the Aperlo reference is a mere equivalent substitution for the lever actuated mechanism of the Tucker et al. reference and is just as capable as the Tucker et al. mechanism of regulating a discharged amount of fluid.

marked-up fig. 2



Regarding claim 3, the Tucker et al. reference discloses that the support member comprises a plurality of air passages (52; also fig. 15). The Tucker et al. reference DIFFERS in that it does not disclose that the upper opening/closing member contains all limitations as claimed. Attention, however, is directed to the Aperlo reference, which discloses that the upper opening/closing member (30) comprises a push-pin (26b) protrudingly formed on a top of the operating shaft (26) thereof, and wherein the pressing member (44) is formed with an air passage at a center of a top part (44b; also fig 2) thereof. It, therefore, would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Tucker et al. reference by employing an additional air passage in view of the teachings of the Aperlo reference in



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order to allow the fluid chamber (containing 48 of the Tucker et al. reference; also fig. 8) to vent to the atmosphere more quickly.

Regarding claim 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the Tucker et al. dispensing apparatus was obviously capable of dispensing an oral cleaning liquid.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker et al. (as discussed supra) in view of Hanna et al. (4964544).

The Tucker et al. reference discloses a lower opening/closing member (56) connected to the liquid discharge-operating member so that it is operated by the liquid discharge-operating member (i.e. as the liquid discharge-operating member is moved down, fluid is forced through air passages 52 to move the lower opening/closing member) and capable of being air-tightly engaged to a lower part of the liquid inflow member (i.e. by sealing air passages 52 which are connected to a lower part of the liquid inflow member via the support member 50; also marked-up fig. 8).

The Tucker et al. reference DIFFERS in that it does not disclose that the liquid discharging member comprises an inflow member as claimed. Attention, however, is directed to the Hanna et al. reference, which discloses another liquid dispensing apparatus capable of regulating a discharged amount of liquid, having a liquid inflow member (20) having a space (21) formed therein, thread-engaged with the threaded part (23) of a protrusion part (11) and capable of being vertically relatively-moveable to the protrusion part (i.e. by rotating the liquid inflow member with respect to the protrusion part), thereby regulating a volume of the protrusion part. It, therefore, would

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have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Tucker et al. reference in view of the teachings of the Hanna et al. reference in order to provide a structure that is easier to clean and maintain by disassembling the thread parts to access the interior of the dispensing apparatus.

***Allowable Subject Matter***

8. Claims 4-5 and 9-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONNELL LONG whose telephone number is (571)270-5610. The examiner can normally be reached on Monday through Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoa Huynh can be reached on (571)272-4888. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Khoa D. Huynh/  
Supervisory Patent Examiner, Art Unit 4128